

CLAIMS

1. A method of performing position determination in a network, comprising:
receiving from the network an indication to perform a position fix for a user equipment (UE);
sending to the network an acknowledgment to perform the position fix;
selectively sending to the network a position estimate for the UE;
performing location processing with the network to obtain the position fix for the UE if the location processing is initiated by the network; and
bypassing the location processing with the network if the position estimate is sent to the network and the location processing is not initiated by the network.
2. The method of claim 1, wherein the receiving from the network the indication to perform the position fix for the UE comprises
receiving from the network a request for permission to perform the position fix for the UE.
3. The method of claim 1, wherein the selectively sending to the network the position estimate for the UE comprises
sending the position estimate for the UE to the network without the position estimate being requested by the network.
4. The method of claim 1, wherein the selectively sending to the network the position estimate for the UE comprises
sending the position estimate for the UE to the network if the position estimate is available at the UE.
5. The method of claim 1, wherein the selectively sending to the network the position estimate for the UE comprises
sending the position estimate for the UE to the network if a UE-based positioning mode is allowed.
6. The method of claim 1, wherein the selectively sending to the network the position estimate for the UE comprises

sending the position estimate for the UE to the network if the position estimate is derived without interaction with the network.

7. The method of claim 1, wherein the selectively sending to the network the position estimate for the UE comprises

sending the position estimate for the UE to the network if an indication to perform an immediate position fix for the UE is received from the network.

8. The method of claim 1, wherein the performing location processing with the network comprises

performing the location processing in accordance with a UE-based positioning mode.

9. The method of claim 1, wherein the performing location processing with the network comprises

performing the location processing in accordance with a UE-assisted positioning mode.

10. The method of claim 1, wherein the position estimate for the UE comprises latitude and longitude information for the UE.

11. The method of claim 10, wherein the position estimate for the UE further comprises an uncertainty for the latitude and longitude information.

12. The method of claim 11, wherein the position estimate for the UE further comprises a confidence in the latitude and longitude information being within the uncertainty.

13. An apparatus comprising:

a receiver operative to receive from a network an indication to perform a position fix for a user equipment (UE);

a transmitter operative to send to the network an acknowledgment to perform the position fix and to selectively send to the network a position estimate for the UE; and

a processor operative to perform location processing with the network to obtain the position fix for the UE if the location processing is initiated by the network and to bypass the location processing with the network if the position estimate is sent to the network and the location processing is not initiated by the network.

14. The apparatus of claim 13, wherein the processor is operative to perform the location processing in accordance with a UE-based positioning mode or a UE-assisted positioning mode.

15. The apparatus of claim 13, wherein the processor is operative to send the position estimate for the UE to the network if the position estimate is available at the UE.

16. The apparatus of claim 13, wherein the position estimate for the UE comprises latitude and longitude information for the UE and an uncertainty for the latitude and longitude information.

17. An apparatus comprising:
means for receiving from a network an indication to perform a position fix for a user equipment (UE);
means for sending to the network an acknowledgment to perform the position fix;
means for selectively sending to the network a position estimate for the UE;
means for performing location processing with the network to obtain the position fix for the UE if the location processing is initiated by the network; and
means for bypassing the location processing with the network if the position estimate is sent to the network and the location processing is not initiated by the network.

18. The apparatus of claim 17, wherein the means for performing location processing with the network comprises

means for performing the location processing in accordance with a UE-based positioning mode or a UE-assisted positioning mode.

19. The apparatus of claim 17, further comprising:
means for sending the position estimate for the UE to the network if the position estimate is available at the UE.

20. The apparatus of claim 17, wherein the position estimate for the UE comprises latitude and longitude information for the UE and an uncertainty for the latitude and longitude information.

21. A method of performing position determination in a network, comprising:
sending to the network a request for transfer of a position estimate for a user equipment (UE) to a client entity;
selectively sending to the network a position estimate for the UE;
performing location processing with the network to obtain a position fix for the UE if the location processing is initiated by the network; and
bypassing the location processing with the network if the position estimate is sent to the network and the location processing is not initiated by the network.

22. The method of claim 21, wherein the selectively sending to the network the position estimate for the UE comprises
sending the position estimate for the UE to the network if the position estimate is available at the UE and without the position estimate being requested by the network.

23. A method of performing position determination in a network, comprising:
exchanging signaling with the network to initiate periodic location service for a user equipment (UE), the signaling including a schedule of location reporting events;
and
for each location reporting event in the schedule,
selectively sending to the network a position estimate for the UE,
performing location processing with the network to obtain a position fix for the UE if the location processing is initiated by the network, and

bypassing the location processing with the network if the position estimate is sent to the network and the location processing is not initiated by the network.

24. The method of claim 23, further comprising:
performing location processing with the network to refresh location assistance data, as necessary.

25. The method of claim 23, wherein the exchanging signaling with the network to initiate periodic location service for the UE comprises
receiving from the network an indication to start periodic location service for the UE.

26. The method of claim 23, wherein the exchanging signaling with the network to initiate periodic location service for the UE comprises
sending to the network an indication to start periodic location service for the UE.

27. The method of claim 23, further comprising:
for each location reporting event in the schedule,
sending to the network a request for a location service, and wherein the position estimate for the UE is selectively sent along with the request for the location service.

28. The method of claim 27, wherein the selectively sending to the network the position estimate for the UE comprises
sending to the network the position estimate for the UE if the position estimate is available at the UE.

29. A method of performing position determination in a network, comprising:
sending to a user equipment (UE) an indication to perform a position fix for the UE;
receiving from the UE an acknowledgment to perform the position fix;
receiving a position estimate for the UE if sent by the UE;

performing location processing with the UE to obtain the position fix for the UE if the position estimate for the UE is not received; and

using the position estimate for the UE and bypassing the location processing if the position estimate for the UE is received.

30. The method of claim 29, further comprising:

receiving from a client entity a request for the position fix for the UE; and

providing the position estimate for the UE to the client entity.

31. The method of claim 29, wherein the performing location processing with the UE comprises

initiating a location session between the UE and a network entity designated to support position determination for the UE, wherein the network entity and UE perform the position fix for the UE, and

receiving from the network entity the position fix for the UE.

32. The method of claim 29, wherein the using the position estimate for the UE comprises

determining whether the position estimate received from the UE meets at least one criterion, and

using the position estimate if the at least one criterion is met.

33. The method of claim 29, wherein the using the position estimate for the UE comprises

determining whether the position estimate received from the UE meets quality of service (QoS) requirements, and

using the position estimate if the quality of service requirements are met.

34. An apparatus comprising:

a communication unit operative to send to a user equipment (UE) an indication to perform a position fix for the UE, to receive from the UE an acknowledgment to perform the position fix, and to receive a position estimate for the UE if sent by the UE; and

a processor operative to perform location processing with the UE to obtain the position fix for the UE if the position estimate for the UE is not received and to use the position estimate for the UE and bypass the location processing if the position estimate for the UE is received.

35. The apparatus of claim 34, wherein the communication unit is further operative to receive from a client entity a request for the position fix for the UE and to send the position estimate for the UE to the client entity.

36. The apparatus of claim 34, wherein the processor is operative to initiate a location session between the UE and a network entity designated to support position determination for the UE in order to perform the position fix for the UE, and wherein the communication unit is operative to receive from the network entity the position fix for the UE.

37. The apparatus of claim 34, wherein the processor is operative to determine whether the position estimate received from the UE meets at least one criterion and to use the position estimate if the at least one criterion is met.

38. An apparatus comprising:

means for sending to a user equipment (UE) an indication to perform a position fix for the UE;

means for receiving from the UE an acknowledgment to perform the position fix;

means for receiving a position estimate for the UE if sent by the UE;

means for performing location processing with the UE to obtain the position fix for the UE if the position estimate for the UE is not received; and

means for using the position estimate for the UE and bypassing the location processing if the position estimate for the UE is received.

39. The apparatus of claim 38, further comprising:

means for receiving from a client entity a request for the position fix for the UE;

and

means for providing the position estimate for the UE to the client entity.

40. The apparatus of claim 38, wherein the means for performing location processing with the UE comprises

means for initiating a location session between the UE and a network entity designated to support position determination for the UE in order to perform the position fix for the UE, and

means for receiving from the network entity the position fix for the UE.

41. The apparatus of claim 38, wherein the means for using the position estimate for the UE comprises

means for determining whether the position estimate received from the UE meets at least one criterion, and

means for using the position estimate if the at least one criterion is met.